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West Pender Street, Vancouver, British Columbia V6C 1G8 (CA).

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(74) Agent: MANNING, Gavin, N.; Oyen Wiggs Green & Mutala, Suite 480, 601 West Cordova Street, Vancouver, British Columbia V6B 1G1 (CA).

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(71) Applicants and

(72) Inventors: BARRETT, Brad [CA/CA]; Suite 600, 700 West Pender Street, Vancouver, British Columbia V6C 1G8 (CA). VASILAKOS, John [CA/CA]; Suite 600, 700

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.



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(54) Title: SELECTION AND ADAPTATION SYSTEM AND METHOD FOR THE DELIVERY OF INDIVIDUALIZED TELEVISION COMMERCIAL(S) TO AN IDENTIFIED ADVANCED TELEVISION VIEWER

(57) Abstract: The present invention (Individualized Television Commercial Selection & Adaptation System) is a method and system of commerce allowing viewer(s) of an advanced television to receive and view individualized television commercial(s). The present invention operates by determining when an identified and/or identifiable viewer is conducting a television viewing session on an identified and/or identifiable advanced television. A system processor selects a television commercial(s) from a database containing a plurality of television commercials by referencing the said viewers consumer profile against a set of television commercial selection criteria. The selected commercial is then adapted according to a set of television commercial adaptation criteria. The selected and adapted television commercial(s) is then communicated to the said viewer location via a wide area network arrangement (e.g. television channel). The primary source of income for the system will be from advertiser(s) and/or manufacturer(s) who utilize the system in order to advertise and market product(s) and/or service(s).

SELECTION & ADAPTATION SYSTEM & METHOD FOR THE DELIVERY OF INDIVIDUALIZED TELEVISION COMMERCIAL(S) TO AN IDENTIFIED ADVANCED TELEVISION VIEWER

Description: This invention relates to a method and system of commerce allowing viewer(s) of an advanced television to receive and view individualized television commercial(s). The present invention operates by determining when an identified and/or identifiable viewer is conducting a television viewing session on an identified and/or identifiable advanced television. A system processor selects a television commercial(s) from a database containing a plurality of television commercials by referencing the said viewers consumer profile against a set of television commercial selection criteria. The selected commercial is then adapted according to a set of television commercial adaptation criteria. The selected and adapted television commercial(s) is then communicated to the said viewer location via a wide area network arrangement (e.g. television channel). The primary source of income for the system will be from advertiser(s) and/or manufacturer(s) who utilize the system in order to advertise and market product(s) and/or services(s).

CLAIMS

What is claimed is:

1. A method and system wherein the present invention (the "Television Commercial Selection & Adaptation System") is a form of commerce for the purpose of selecting and adapting a television commercial advertisement video session(s) with the intention of improving and increasing the success of the selected and adapted television commercial advertisement video session(s). And wherein the said process of selecting and adapting a television commercial advertisement video session (the "Television Commercial") will comprise a method and system of referencing and/or comparing information and/or data contained within the said television viewers consumer profile (the "Viewer Profile") against/and or with a set of television commercial selection and adaptation criteria.
2. A method in accordance with claim 1, wherein the present invention comprises a method and system capable of determining whether an identified and/or identifiable viewer at an identified and/or identifiable viewer location, or alternatively an unidentified and/or unidentifiable viewer at an identified and/or identifiable viewer location ("Remote Viewer Module") is conducting a television viewing session.
3. A method in accordance with claim 1, wherein the present invention is capable of associating and/or identifying an individual viewer and/or Remote Viewer Module with a Viewer Profile contained and/or stored within a viewer profile database (the "Viewer Profile Database").
4. A method in accordance with claim 1, wherein the present invention comprises a method and system capable of utilizing an algorithm and/or system of algorithms for the purpose of referencing information and/or data contained within an identified Viewer Profile against and/or with a plurality of Television Commercial selection criteria for the purpose of selecting a Television Commercial from a database containing a plurality of Television Commercials (the "Television Commercial Database").
5. A method in accordance with claim 4, wherein the present invention comprises a method and system capable of utilizing an algorithm and/or system of algorithms for the purpose adapting a Television Commercial that has been selected in accordance with claim 4, and wherein the said selected Television Commercial may/will be adapted by referencing data and information contained within the identified Viewer Profile against and/or with adaptation criteria associated with the selected Television Commercial.

6. A method in accordance with claim 2, wherein the present invention is capable of communicating a Television Commercial selected and adapted in accordance with claim 3 and claim 4, and wherein the said Television Commercial is communicated and/or transmitted to a remote location for display on a Remote Viewer Module (i.e. advanced television and/or computer and/or interactive multimedia viewer platform).

7. A method in accordance with claim 1, wherein the present invention is intended and designed to promote, encourage and assist with the advertising and/or marketing of goods and/or services, and wherein the Television Commercial Selection & Adaptation System comprises:

- (a) a television commercial video session and selection and adaptation criteria database (the "Television Commercial Database");
- (b) a viewer profile database (the "Viewer Profile Database");
- (c) a remote viewer module (the "Remote Viewer Module"); and
- (d) a system control and processing module capable of selecting, adapting and communicating a television commercial video session to an identified television viewer (the "System Control & Processing Module").

8. A method in accordance with claim 1, wherein a Television Commercial Selection & Adaptation System is capable of:

- (a) a means of creating, generating and/or utilizing a Television Commercial, wherein the said Television Commercial is designed and/or formatted for display on an Advanced Television, and wherein the said Television Commercial may/will be communicated to a remote location via a commercial television broadcast network and/or any other means capable of delivering and/or communicating a Television Commercial to a remote location;
- (b) a means of creating, generating and maintaining a database comprising a plurality of Television Commercial video session(s);
- (c) a means of creating, generating and maintaining a database comprised of a plurality of viewer profile(s) wherein each of the viewer profiles (the "Viewer Profile") maintained within the said database will be capable of being associated with/to an identified

and/or identifiable viewer and/or an identified and/or identifiable Remote Viewer Module;

- (d) a means wherein a viewer and/or operator of a Remote Viewer Module may establish and/or open a Viewer Profile within a Viewer Profile Database;
- (e) a means wherein an identified and/or identifiable Remote Viewer Module that is conducting a television viewing session and does not have a minimum of one Viewer Profile within a Viewer Profile Database associated to it, may/will automatically be assigned and/or have established a Viewer Profile within a Viewer Profile Database, and wherein the said procedure and/or process of establishing a Viewer Profile will occur notwithstanding that a viewer and/or operator of the said Remote Viewer Module conducting a television viewing session has not deliberately and/or mindfully established a Viewer Profile within the Viewer Profile Database;
- (f) a means if only one Viewer Profile is associated with an identified and/or identifiable Remote Viewer Module, and wherein the present invention is capable of generating and/or utilizing a system of algorithms to reference data and information contained within the one Viewer Profile associated with the identified Remote viewer Module for the purpose of selecting a Television Commercial(s) from the Television Commercial Database that will be communicated to the said Remote Viewer Module;
- (g) a means when there is greater than one Viewer Profile associated with a Remote Viewer Module of utilizing viewer input from a viewer conducting a television viewing session at the said identified Remote Viewer Module, whereby a viewer may/will identify themselves through some method of user interaction with the Remote Viewer Module, and wherein the said identity of the viewer may/will be communicated and utilized for the purpose of selecting and adapting a Television Commercial,
- (h) a means wherein a plurality of Viewer Profiles may/will be associated with an identified Remote Viewer Module, and wherein an unidentified and/or unidentifiable viewer may/will conduct a television viewing session at the said identified Remote Viewer Module, and wherein there will exist a means of creating, generating and/or utilizing an algorithm and/or system of algorithms that may/will be utilized for the purpose of assessing

and processing data and information derived from the said plurality of said Viewer Profiles associated with the said identified Remote Viewer Module, and wherein this information along with data and information associated with the said unidentified viewers actions since the beginning of the said television viewing session (e.g. time of day, type of show being viewed) may/will be utilized for the purpose of guessing as to the identify of the viewer conducting the television viewing session at the said Remote Viewer Module, and further wherein the Viewer Profile of the said guessed viewer identity will be utilized for the purpose of selecting and adapting a television commercial(s) to be communicated to the said Remote Viewer Module.

- (i) a means wherein there may/will be no Viewer Profile associated with a Remote Viewer Module currently conducting a television viewing session. And wherein there is a method of creating, generating and/or utilizing an algorithm and/or system of algorithms that may/will be utilized for the purpose of assessing data and information obtained from the said Remote Viewer Module currently conducting a television viewing session, and wherein the said data and information may/will include data and information about the said television session currently being conducted including: time of day the said session began, and the type of television program being viewed, and wherein the said data and information may/will be utilized for the purpose of selecting and adapting a Television Commercial to be communicated to the said Remote Viewer Module.
- (j) a means wherein a plurality of Viewer Profiles contained within the Viewer Profile Database are associated with an identified Remote Viewer Module at which an identified plurality of viewers or an unidentified viewer(s) is conducting the said television viewing session. And wherein there will exists a means of creating, generating and/or utilizing an algorithm and/or system of algorithms that may/will be utilized for the purpose of selecting a Television Commercial contained within the Television Commercial Database.
- (k) a means of updating a Viewer Profile with data and information during and/or following the completion of each of the said associated viewers television viewing session.
- (l) a means by which a selected Television Commercial may be adapted and/or altered and/or regenerated;

- (m) a means of communicating a selected and adapted Television Commercial to the Remote Viewer Module associated to and/or with the Viewer Profile(s) utilized for the purpose of selecting and adapting a selected and adapted Television Commercial;
- (n) a means and apparatus, wherein the said apparatus is a Remote Viewer Module capable of receiving, processing and displaying a Television Commercial (i.e. Advanced Television and/or Computer and/or Interactive Multimedia Platform");
- (o) a means by which a Remote Viewer Module may/will be capable of communicating via a wide area network arrangement (e.g. internet");
- (p) a means by which a Remote Viewer Module may receive process and communicate direct viewer input; and
- (q) a means whereby a selected and adapted Television Commercial may be communicated to an identified Remote viewer Module.

9. A method in accordance with claim 2, wherein a Television Commercial Selection And Adaptation System may/will comprise a method of creating, generating and or utilizing and/or acquiring the right and/or license(s) to utilize a plurality of Television Commercial Video Session(s) (the "Television Commercial Video Session");

10. A method in accordance with claim 7, wherein a Television Commercial Database may/will comprise:

- (a) a plurality of un-coded television commercial broadcast data session(s), (the "Un-coded Television Commercial Advertisement") wherein the said Un-coded Television Commercial Advertisement is formatted for display on an Advanced Television;
- (b) a plurality of pre-established and predetermined parameter(s), criteria(s) and guideline(s), wherein the parameter(s), criteria(s) and guideline(s) may/will be utilized for selecting a Television Commercial (the "Television Commercial Selection Criteria");
- (c) a plurality of pre-established and predetermined parameter(s), criteria(s) and guideline(s), wherein the said parameter(s), criteria(s) and guideline(s) may/will be utilized for the purpose of

adapting a Television Commercial (the "Television Commercial Adaptation Criteria");

(d) a communication port.

11. A method in accordance with claim 7, wherein a Viewer Profile Database may/will comprise:

(a) a storage mechanism;

(b) a database of Viewer Profiles wherein each Viewer Profile may/will contain the following:

- (i) a viewers name and personal identification data;
- (ii) a viewers contact address information data;
- (iii) a viewers birth date information data;
- (iv) a viewers family demographic information data;
- (v) a viewers income and employment information data;
- (vi) a viewers accommodation data (i.e. ; house, apartment, number of bedrooms, etc.)
- (vii) additional financial information data;
- (viii) a viewer payment mechanism information data (e.g. visa number);
- (ix) data relating to a viewers product and/or service purchasing history;
- (x) data relating to a viewers television viewing participation history;
- (xi) a variety of information and/or data relating to a viewers personal preferences and which may/will include: preferred color(s), preferred animal, preferred public personality's, preferred types of food; preferred physical locations; preferred type of fauna, preferred type of music; and
- (xii) any other data and/or information necessary in order to allow the present invention to operate at its fullest and greatest potential.

(c) a communication port;

(d) any other data and/or information necessary to allow the present invention to operate at its fullest and greatest possible potential

12. A method in accordance with **claim 2**, wherein a Remote Viewer Module may/will comprise:

- (a) a processor;
- (b) a storage mechanism;
- (c) a communication module capable of communicating via a wide area network arrangement;
- (d) a means of receiving, decoding and processing a Television Commercial;
- (e) a video display facility;
- (f) a means of pausing a video broadcast data session, and restarting the said video broadcast data session at the same video frame image at which the video broadcast data session was initially interrupted;
- (g) a means of displaying a viewer controlled graphic image cursor;
- (h) a means of receiving, processing, interpreting and communicating direct user input commands, wherein the said viewer input commands may/will comprise:
 - (i) a means of pausing a video display image upon receiving a viewer requested interrupt command;
 - (ii) a means of manipulating the direction and/or controlling the position of a graphic cursor within the video display image area;
 - (iii) a means of selecting a user selectable object or an available action via an user command confirmation request; and
 - (iv) a means of executing any user command request that allows and/or enables the system to operate at its fullest and greatest potential.
- (i) a means of displaying television Internet and/or other multimedia communication data;
- (j) a means of creating, generating, storing, accessing and communicating an identification code unique to that Remote Viewer Module, and wherein the said unique identification code

enables that said Remote Viewer Module to be identified and/or located on a wide area network arrangement, and wherein the said identification code may/will be communicated to a plurality of different locations and at a plurality of different times;

- (k) a means of generating, storing and communicating data and information relating to a current television viewing session being conducted at an identified Remote Viewer Module, and wherein the said data and information may will include the action(s) of a viewer viewing conducting the said television viewing session at the identified Remote Viewer Module (e.g. time of day, television show being viewed) and wherein the said data and information may/will be communicated and/or accessible by a System Control & Processing Module;

13. A method in accordance with claim 7, wherein a System Control & Processing Module may/will comprise;

- (a) a processor;
- (b) a storage mechanism;
- (c) a communication module;
- (d) a communication module capable of communicating via a wide area network arrangement;
- (e) a means of accessing and communicating with a Television Commercial Database;
- (f) a means of accessing and communicating with a Viewer Profile Database ;
- (g) a means of ensuring the confidentiality and Integrity of the data transmission process;
- (h) a means of carrying out bi-directional communication with a plurality of Remote Viewer Module(s);

14. A method in accordance with claim 13, wherein a System Control & Processing Module is integrated with a processor, and wherein the said processor may/will be capable of:

- (a) a means of carrying out bi-directional communication function(s) with a plurality of remote locations including a plurality of Remote Viewer Module(s);
- (b) a means of accessing a Viewer Profile Database thereby enabling and allowing:
 - (i) a means of removing and/or altering an existing Viewer Profile(s);
 - (ii) a means of establishing a new Viewer Profile;
 - (iii) a means of assigning and processing a unique Viewer Profile account code whereby the said Viewer Profile account code may/will be used in order to determine that Viewer Profile is associated with an identified television viewer and/or identified Remote Viewer Module;
 - (iv) a means of performing account maintenance procedure(s) and function(s) wherein a data and information contained within a pre-existing Viewer Profile may/will be altered and/or changed ;
 - (v) a means of accessing a Viewer Profile Account for the purpose of selecting and/or adapting a Television Commercial;
- (c) a means of accessing a Television Commercial Database; wherein the processor will be capable of:
 - (i) a means of adding, removing and/or altering a Television Commercial to the Television Commercial Database
 - (ii) a means of locating and accessing Television Commercial Selection and Adaptation Criteria.
 - (iv) a means of performing database maintenance procedures functions;
- (d) a means of accessing a Remote Viewer Module for the following purposes:
 - (i) a means of receiving and processing viewer specification(s) and direction(s), and wherein the said specification(s) and direction(s) may be, received from a plurality of viewer locations;
 - (ii) a means of ascertaining that data received from a remote Viewer Module has been transmitted and

- received in an accurate and real time manner, thereby ensuring the confidentiality and integrity of the data transmission process;
- (iii) a means of opening a Viewer Account for a new viewer;
 - (iv) a means of closing a Viewer Profile for an existing viewer;
 - (vi) a means of inputting, and altering a viewers Viewer Profile information and data;
 - (vii) a means of assigning a unique account code and a unique Personal identification Code (PIN) to each advanced television viewer and/ or Remote Viewer Module for the purpose of identifying and associating a television viewer and/or a Remote Viewer Module with a Viewer Profile(s); and
 - (viii) a means of inputting a viewers Viewer Profile data and information.
- (e) a means of selecting and adapting a television commercial, wherein the said process may/will comprise the following steps:
- (i) a means of identifying a Remote Viewer Module that is presently conducting a television viewing session;
 - (ii) a means of accessing and retrieving the Remote Viewer Module identification code and/or address that will enable the Remote Viewer Module to be located and communicated with via a wide area network arrangement;
 - (iii) a means of determining if more then one Viewer Profile is associated with the identified Remote Viewer Module, and if so attempt to identify the identity of the viewer conducting the television viewing session at the identified Remote Viewer Module;
 - (iv) if a viewer conducting a television viewing session can be identified a means of accessing and retrieving the viewer identification code and the Remote Viewer Module identification code and/or address that will enable the Remote Viewer Module to be located and communicated with via a wide area network arrangement;
 - (v) if a viewer conducting a television viewing session cannot be identified, a means of accessing information related to the current television viewing

- session conducted by the Remote Viewer Module wherein that information may/will be utilized for the purpose of making a guess of the viewer conducting a television viewing session;
- (vi) a means when no Viewer Profile is associated with a Remote Viewer Module conducting a television viewing session, of establishing a Viewer Profile for the said identified Remote Viewer Module, and a means of communicating a default television commercial that may/or may not be in accordance with the actions of the Remote Viewer Module since beginning the said television viewing session;
 - (vii) a means having identified and/or guessed to the identity of the viewer conducting the television viewing session of accessing and retrieving the Viewer Profile from the Viewer Profile Database that is associated with the identified Remote Viewer Module and/or the viewer conducting the television viewing session;
 - (viii) a means of accessing the Television Commercial Selection Criteria
 - (ix) a means utilizing a system of predetermined algorithms of Television Commercial Selection Criteria against and/or with the identified and accessed Viewer Profile for the purpose of selecting a Television Commercial form the Television Commercial Database;
 - (x) a means of accessing and retrieving a selected Television Commercial.
 - (xi) a means of accessing and retrieving the Adaptation Criteria stored within Television Commercial Database that are associated with a selected Television Commercials,
 - (xii) a means utilizing a system of predetermined algorithms of processing the Television Commercial Adaptation Criteria against and/or with the identified and accessed Viewer Profile for the purpose of adapting the selected Television Commercial;
 - (xiii) a means of transmit and/or communicating the selected and adapted Television Commercial Video Session to the identified Remote Viewer Module; and
 - (xiv) a means of collecting any available information and/or data regarding and/or relating to a viewers

interaction with the selected, adapted and communicated Television Commercial.

- (f) a means of generating a data and information list(s) regarding the television viewer and/or Remote Viewer Modules interaction with an identified television commercial, for the purpose of evaluating the effectiveness of a specific Television Commercial, and wherein the said process may/will include a comparison and analysis of the performance and effectiveness of a specific Television Commercial based upon performance criteria, and wherein the list may/will include viewers names, information and data, and further wherein the said list(s) may/will be commercially marketed by the system provider;

15. A method in accordance with claim 2, wherein a plurality of viewers at a single Remote Viewer Module may establish and be allocated their own Viewer Profile within the Viewer Profile Database.

16. A method in accordance with claim 2, wherein the present invention may/will be utilized in conjunction with a variety of advanced television system(s), method(s) and/or apparatus(s) including:

- (a) a system allowing for a means of electronic product placement within television programs and/or commercial advertisements, and wherein video objects contained within a television program(s) and/or commercial(s) advertisement(s) are made user selectable and further processable via encoded data and/or a world wide network arrangement;
- (b) a system requiring viewer input and/or participation within the context of a television commercial advertisement(s) (e.g. answer a trivia question, pick your favorite color of carpet, etc.) and wherein a viewer may/will be required to comply with the parameter(s) and guideline(s) of a television commercial video session which may/will require interactive input participation action(s) to be completed by a viewer in order for the said viewer to be permitted to view all of and/or a portion of a television commercial advertisement;
- (c) a television commercial advertisement(s) viewer rewards program;
- (d) a viewer consumer profile information rewards program;

- (e) a system for user selectable and processable secondary display images placed within other television broadcast program(s);
- (f) a system rewarding electronic coupon(s); and
- (g) any other system that may/will be utilized with the present invention.

17. A method in accordance with claim 11, wherein a Viewer Profile may/will be divided into a plurality of components, and wherein each component of the plurality of components of the said Viewer Profile may/will be stored on a plurality of alternate and/or alternative storage mediums.

18. A method in accordance with claim 8, wherein an identified and/or identifiable viewer that has been assigned a Viewer Profile contained within the Viewer Profile Database may/will conduct a television viewing session at a different and/or alternate Remote Viewing Module then the Remote Viewing Module at which the said viewer established their said Viewer Profile.

19. A method in accordance with claim 11 and claim 12, wherein a Remote Viewer Module may/will serve as a Viewer Profile Database for any one of and/or all of the Viewer Profile(s) established and/or associated with that said Remote Viewer Module.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/CA 00/00627

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H04N7/16 H04N7/173

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H04N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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A	7 May 1996 (1996-05-07) the whole document	2-18
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A	4 February 1998 (1998-02-04) the whole document	2-18

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

° Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

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"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Greve, M

INTERNATIONAL SEARCH REPORT

information on patent family members

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